Fire Support Systems Program Conference

Command, Control, Communications, Computers, and Intelligence (C4I) Systems

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Systems Covered

- Advanced Field Artillery Tactical Data System (AFATDS)
- Effects Management Tool (EMT)
- Back-up Computer System – Replacement (BUCS-R)
- Light-Weight Technical Fire Direction System (LWTFDS)
- Gun Display Unit – Replacement (GDU-R)
- Target Location, Designation, Hand-off System (TLDHS)
- Pocket-sized Forward Entry Device (PFED)

Advanced Field Artillery Tactical Data System (AFATDS)

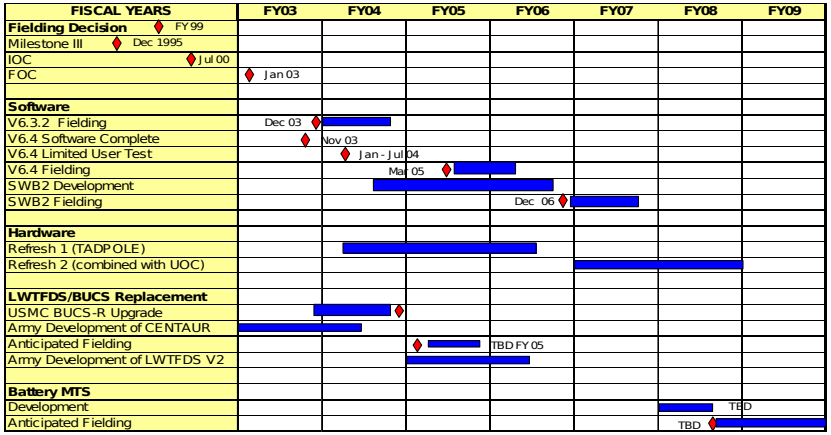
Capability

The AFATDS is a an automated fire support command and control (C2) system. AFATDS automates the fire planning, tactical fire direction, and fire support coordination required to support maneuver from the sea and subsequent operations ashore. It provides support for controling all fire support assets ranging from Field Artillery (cannons/missiles) to mortars, Close Air Support, Naval Gunfire, and Army and Air Force air support. AFATDS is currently post MSIII and has been fielded across the Marine Corps.

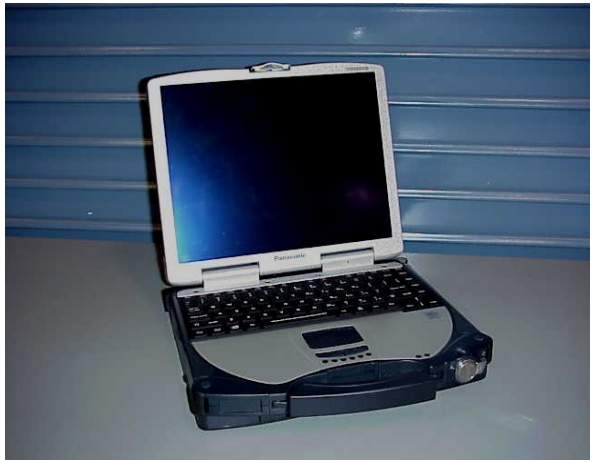
Hardware Refresh Fielding Plan

GAINING COMMANDS	DATE	QTY
SUPP EST	1st QTR FY05	50
III MEF OKI)	2nd QTR FY05	62
MARFORRES	3rd QTR FY05	140
III MEF(HI)	4th QTR FY05	19
II MEF	1st QTR FY06	129
I MEF	2nd QTR FY06	131

Schedule



Effects Management Tool (EMT)



Capability

The EMT is an injector that runs on C2PC and acts as a Fires Client for AFATDS. It is used at the Battalion to MEF COC to make AFATDS information more user friendly, and has developed into a highly capable client application used by personnel to perform specific fires execution and planning functions not requiring the full capability set of an AFATDS workstation.

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

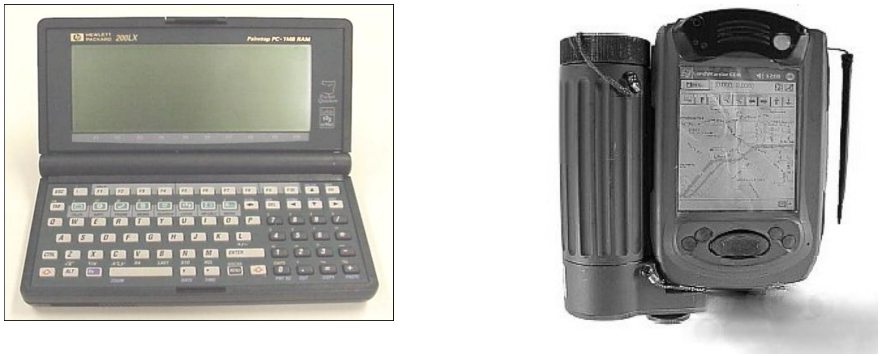
18 were fielded to I MEF in response to OIF needs.

There is not an approved AAO for the EMT.

Schedule

FISCAL YEARS	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Fielding Decision FY 99							
Milestone III Dec 1995							
IOC Jul 00							
FOC Jan 03							
Software							
V6.3.2 Fielding Dec 03							
V6.4 Software Complete Nov 03							
V6.4 Limited User Test Jan - Jul 04							
V6.4 Fielding Mar 05							
SWB2 Development							
SWB2 Fielding Dec 06							
Hardware							
Refresh 1 (TADPOLE)							
Refresh 2 (combined with UOC)							
LWTFDS/BUCS Replacement							
USMC BUCS-R Upgrade							
Army Development of CENTAUR							
Anticipated Fielding TBD FY 05							
Army Development of LWTFDS V2							
Battery MTS							
Development TBD							
Anticipated Fielding TBD							

Back-Up Computer System Replacement (BUCS-R)



Capability

The BUCS-R serves primarily as a survey and meteorological tool to the artillery community. Specifically, the BUCS-R is used in conjunction with the PADS and MMS to ensure timely, accurate, and continuous direction determination and meteorological information is provided to firing units. This software is currently being ported from the HP 200LX to the RPDA.

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

Original Fielding	**88**
AAO	**88**
Spares	**8**
Supporting Est	**20**
Testing	**10**
Total	**127**

Schedule

FISCAL YEARS	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Fielding Decision FY 99							
Milestone III Dec 1995							
IOC Jul 00							
FOC	Jan 03						
Software							
V6.3.2 Fielding	Dec 03						
V6.4 Software Complete		Nov 03					
V6.4 Limited User Test		Jan - Jul 04					
V6.4 Fielding			Mar 05				
SWB2 Development							
SWB2 Fielding				Dec 06			
Hardware							
Refresh 1 (TADPOLE)							
Refresh 2 (combined with UOC)							
LWTFDS/BUCS Replacement							
USMC BUCS-R Upgrade							
Army Development of CENTAUR							
Anticipated Fielding				TBD FY 05			
Army Development of LWTFDS V2							
Battery MTS							
Development						TBD	
Anticipated Fielding						TBD	

Light-Weight Technical Fire Direction System (LWTFDS)

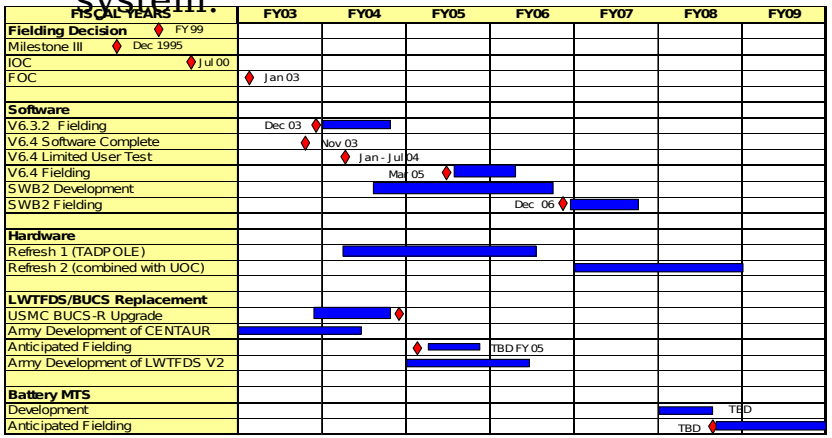
Capability

The BUCS provided a handheld capability of determining automated firing solutions for indirect firing systems. It performed survey functionality and safety computations. The LWTFDS, also called CENTAUR, replaces the technical fire direction capability in the BUCS. Follow on versions of LWTFDS will also provide survey and meteorological functionality current present in the Army FOS system.

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

10th Marines	26
11th Marines	28
12th Marines	6
14th Marines	30
Supporting Establishment	0
Maritime Preposition Force (MPF)	0
NALMEB	0
Depot Maintenance Float Allowance (DMFA)	TBD
War Reserve Materiel Requirement (WRMR)	TBD
Total:	???

Schedule



Gun Display Unit Replacement (GDU-R)

Capability

The GDU-R is a replacement system to the GDU fielded in the early 1987. The GDU-R provides the firing system link in the sensor to shooter chain. It automates firing data determined by the AFATDS and displays it in a user friendly format. It utilizes an RPDA and is versatile. It can be used for any firing system (M198, M777, mortars, or EFSS)

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

None.

(POM was for 5 RPDAs per M198. 300 M198s in USMC.)

Schedule

FISCAL YEARS	FY03	FY04	FY05	FY06	FY07	FY08	FY09
GDU-Replacement							
Army Development	■		■	■			
Anticipated Fielding				◆			
TAD							
Development	■	■	■				

TLDHS Block I

Capability

TLDHS is a modular, man-portable equipment suite that will digitally transmit data to supporting arms elements, and designate targets for laser-seeking Precision Guided Munitions (PGMs) and Laser Spot Trackers (LSTs) quickly and precisely in day, night, and near-all-weather visibility conditions.

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

UNIT TITLE	ALLOWANCES
MARCORDET, EWTGLANT	2
MARCORDET, EWTGPAC	2
FORCE RECON CO, 1st MEF HQ Group	18
FORCE RECON CO, 2nd MEF HQ Group	18
I MEF ANGLICO	8
II MEF ANGLICO	8
III MEF ANGLICO	4
H&S CO, INFBN, INFREGT, 1st MARDIV	20
H&S CO, INFBN, INFREGT, 2nd MARDIV	16
H&S CO, INFBN, INFREGT, 3rd MARDIV (HI)	2
H&S CO, INFBN, INFREGT, 3rd MARDIV	4
RECONCO, RECONBN, 1st MARDIV	27
RECONCO, RECONBN, 2nd MARDIV	27
Distant RECONCO, RECONBN, 3rd MARDIV	18
Deep RECONCO, RECONBN, 3rd MARDIV	9
	TOTAL : 183

Schedule

[redacted]

PFED (TLDHS Block II)

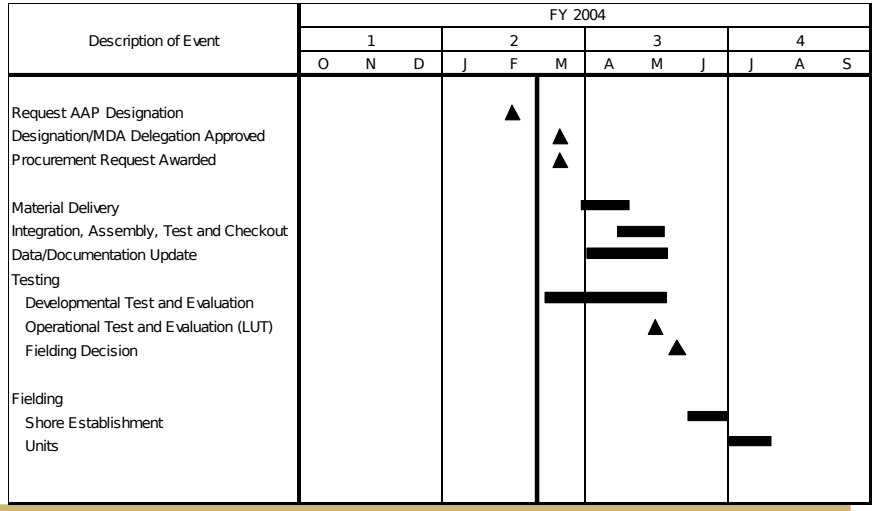
Capability

The PFED system is a Command, Control, and Communications (C3) field artillery system used by Forward Observers (FO) to communicate with the fire support digital network. It allows the FO to call for and control indirect fires, and send/receive reports and status updates.

PLANNED ALLOWANCES AND NUMBERS TO BE FIELDED

T/E#	UNIT DESCRIPTION	
N2108	155MMBTRY, ARTYBN, ARTYREGT, 1ST MARDIV	36
N2208	155MMBTRY, ARTYBN, ARTYREGT, 2D MARDIV	36
B2308	155MMBTRY, ARTYBN, ARTYREGT, 3D MARDIV(HI)	6
N2308	155MMBTRY, ARTYBN, ARTYREGT, 3D MARDIV	12
N2408	155MMBTRY, ARTYBN, ARTYREGT, 4TH MARDIV	27
5980	MAD, EXPEDITIONARY WARFARE TRNG GRP, LANT	2
5981	MAD, EXPEDITIONARY WARFARE TRNG GRP, PAC	6
035060	MARCOR ADMIN DET, ARTY SCHOOL. FT SILL, OK	12
7014	DMFA/WRMR, MCLB, ALBANY, GA	14
	Total	151

Schedule



StrikeLink (TLDHS Block III)

Capability

TLDHS is a modular, man-portable equipment suite that will digitally transmit data to supporting arms elements, and designate targets for laser-seeking Precision Guided Munitions (PGMs) and Laser Spot Trackers (LSTs) quickly and precisely in day, night, and near-all-weather visibility conditions.
Block III provides an interface with AFATDS, NFCS, F-16, and DPSS as well as all Bock I and II capabilities.

Schedule

[redacted]

Appendix A: List Of Allowances and Delivery Schedules

T/E No.	UNIT TITLE	U/I	Multiple	Total	FY04 Blk I	FY04 Blk II	FY05Blk III	TOTALS
4855G	I MEF ANGLICO	8	1	8	6	2		8
N1511	H&SCO, 1st TANKBN, 1st MARDIV	2	1	2		2		2
N1412	RECON CO, RECON BN, 1st MARDIV	9	3	27	6	21		27
N1162	H&SCO, INFBN, INFREGT, 1st MARDIV	2	10	20	20			20
N1751	H&SCO, 1st LIGHT ARMOR RECONBN, 1st MARDIC	2	1	2		2		2
N1771	H&SCO, 3rd LIGHT ARMOR RECONBN, 1st MARDIV	2	1	2		2		2
N2108	155MMBTRY, ARTYBN, ARTYREGT, 1st MARDIV	3	12	36		36		36
N4618	FORCE RECONCO, I MEF HQ GROUP	6	3	18	6	12		18
4855L	II MEF ANGLICO	8	1	8	6	2		8
N1422	RECON CO, RECON BN, 2nd MARDIV	9	3	27	6	21		27
N1173	H&SCO, INFBN, INFREGT, 2nd MARDIV	2	8	16	16			16
N1521	H&SCO, 2nd TANKBN, 2nd MARDIV	2	1	2		2		2
N1761	H&SCO, 2nd LIGHT ARMOR RECONBN, 2nd MARDIV	2	1	2		2		2
N2208	155MMBTRY, ARTYBN, ARTYREGT, 2nd MARDIV	3	12	36		36		36
N4718	FORCE RECONCO, II MEF HQ GROUP	6	3	18	6	12		18
4855M	III MEF ANGLICO	4	1	4		4		4
B1182	H&SCO, INFBN, INFREGT, 3rd MARDIV (HI)	2	2	4	4			4
B2308	155MM, ARTYBN, ARTYREGT, 3rd MARDIV (HI)	3	2	6		6		6
N1182	H&SCO, INFBN, INFREGT, 3rd MARDIV	2	4	8	8			8
N2308	155MMBTRY, ARTYBN, ARTYREGT, 3rd MARDIV	3	4	12		12		12
N1432	DISTANT RECON CO, RECON BN, 3rd MARDIV	6	3	18	6	12		18
N1433	DEEP RECON CO, RECON BN, 3rd MARDIV	3	3	9	4	5		9
M4623	3rd FORCE RECON CO, FMF (RES ONLY)	4	3	12		12		12
M4624	4th FORCE RECON CO (-) and DET (RES ONLY)	4	3	12		12		12
N1192	H&SCO, INFBN, INFREGT, 4th MARDIV	2	9	18		18		18
N1541	H&SCO, 4th TANKBN, 4th MARDIV	2	1	2		2		2
N1581	H&SCO, 8th TANKBN, 4th MARDIV	2	1	2		2		2
N1781	H&SCO, 4th LIGHT ARMOR RECONBN, 4th MARDIV	2	1	2		2		2
N1442	RECONCO, RECONBN, 4th MARDIV	12	3	36		36		36
N2408	155MMBTRY, ARTYBN, ARTYREGT, 4th MARDIV	3	9	27		27		27
N4665	MARINE DET (SOCOM)	1	8	8	8			8
N4953	3rd ANGLICO, MARFORRES	12	1	12		12		12
N4954	4th ANGLICO, MARFORRES	12	1	12	8*	4		12
5980	MAD, EXPEDITIONARY WARFARE TRNG GRP, LANT	2	1	2	2*			2
5981	MAD, EXPEDITIONARY WARFARE TRNG GRP, PAC	6	1	6	6*			6
035060	MARCOR ADMIN DET, ARTY SCHOOL, FT SILL, OK	12	1	12		12		12
	TOTALS			448	118	330		448

NOTE: Above information is accurate as of the date of this publication. Future changes to unit allowances or deliveries are reflected through modification of quantities in the EAF. The EWTGs could receive10 systems each in Block I. N4953/N4954 may share the 8 systems noted under N4954 in Block I.

Questions?